Stormwater Report

FOR

Lake Hills Phase 1

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS

Prepared by:

Madden, Moorhead, & Stokes, LLC.
431 E. Horatio Avenue, Suite 260
Maitland, FL 32751

Issued: June 2025

DAVID ASHLEY STOKES LICENSE No. 66527 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Digitally signed by David A Stokes
Date: 2025.06.06 11:50:31 -04'00'

David A. Stokes, P.E. #66527
Certificate of Authorization No. CA-0007723

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Introduction

The Lake Hills Phase 1 project proposes +/-213 single family homes and the associated infrastructure. The Primary Stormwater ponds and the main spine road for all future and current development within the property were approved as a part of the Lake Hills Mass Grading/Mass Infrastructure under permit application No. 222310-2.

Existing Conditions

The existing site is a previously permitted mass grading/infrastructure project under the permit Application No. 222310-2. The development consists of a Spine Road, the associated drainage and utilities along the road, the Primary Stormwater Ponds to serve the future single-family lots/commercial developments, and the mass grading of future lots and internal roads.

Proposed Conditions

Lake Hills Phase 1 is a permit modification of the Mass Infrastructure/Mass Grading SJRWMD Permit Application No. 222310-2. Lake Hills Phase 1 proposes 213 single family residential homes. The Phase 1 boundary contains the following Basins: Portions of Post-1, Post-2, Post-3, Portions of Post 5, Portions of Post 9, Portions of Post 10, Post 12, and Public Park. The analysis provided in this report are portions of the previously approved stormwater report that support the development in Phase 1 is following the Mass Grading/Mass Infrastructure permit.

Secondary Drainage System

The secondary drainage system was modeled with the Storm Sewers program. The secondary drainage calculations are in Appendix N.

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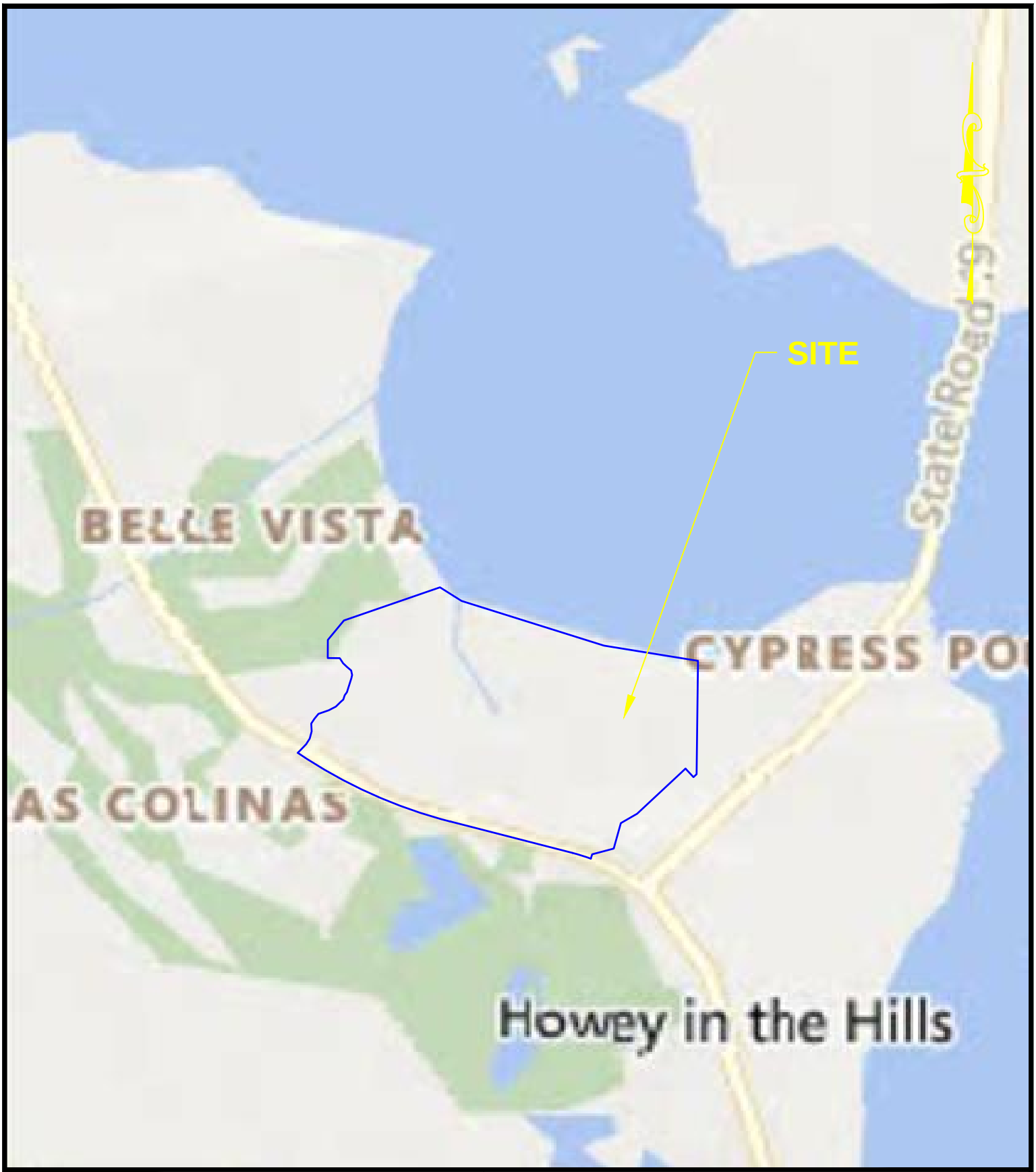
Exhibits

Appendices

EXHIBITS



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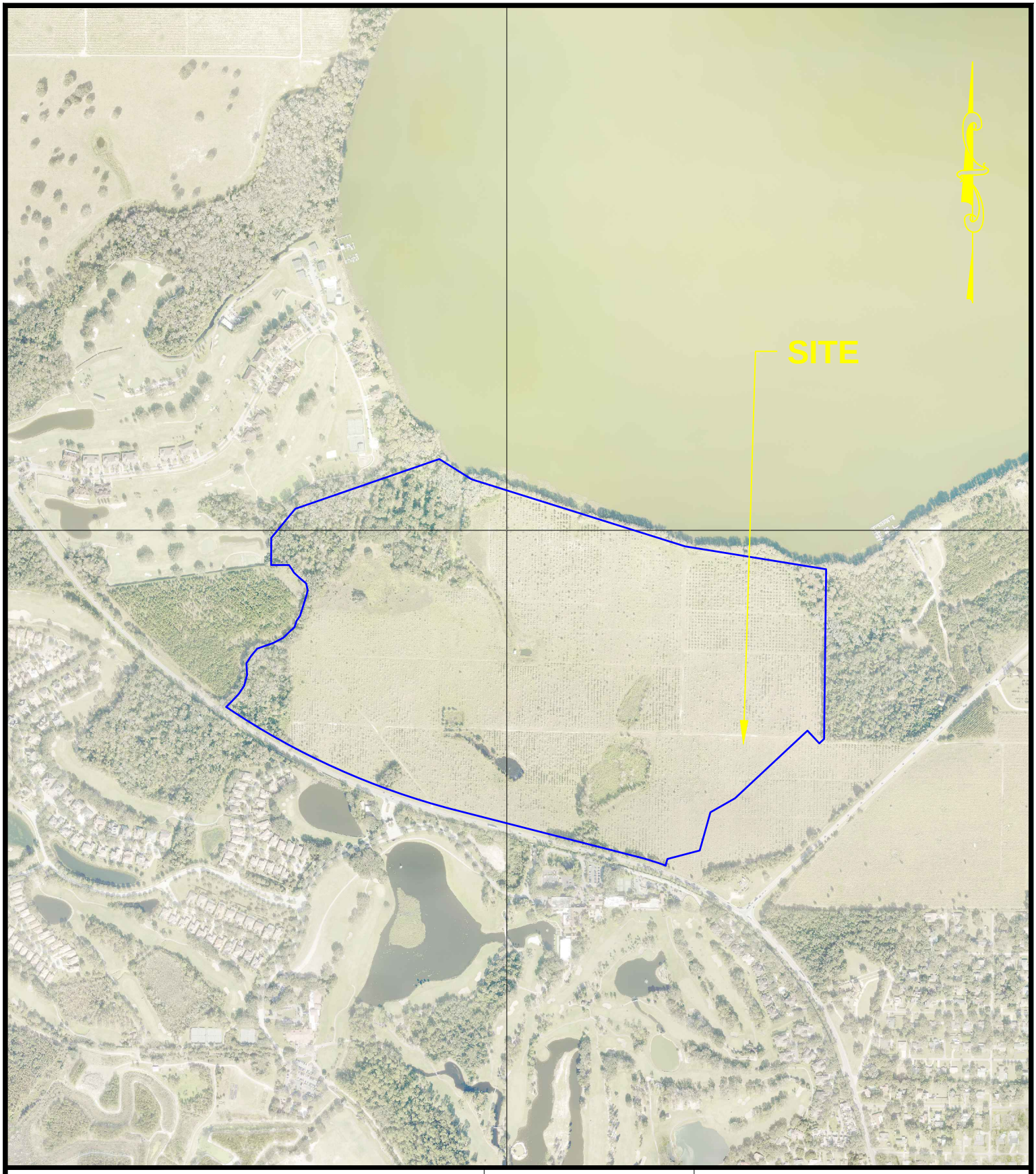
JOB NO.	23019
SEC. 22, TWP. 20, RANGE 25	
DRAWN BY:	KAC
APPROVED BY:	DAS
DATE:	11/06/2024
Scale:	1" = 1500'

LAKE HILLS

LOCATION MAP

GOOGLE MAPS



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LAKE HILLS

AERIAL MAP

GOOGLE MAPS

Appendix A
Summary Sheet

Basin Name	Basin Area Approved	Basin Area In Phase 1	Impervious Area Approved	Impervious Area in Phase 1	Impervious Area Remaining (Future)
Post-1	27.25 Ac.	8.83 Ac.	19.45 Ac.	2.64 Ac.	16.81 Ac.
Post-2	19.34 Ac.	19.34 Ac.	8.50 Ac.	8.50 Ac.	N/A
Post-3	12.80 Ac.	12.80 Ac.	7.54 Ac.	7.43 Ac.	N/A
Post-5	31.98 Ac.	3.40 Ac.	15.95 Ac.	2.14 Ac.	13.81 Ac
Post-9	9.58 Ac.	7.96 Ac.	5.21 Ac.	0.61 Ac.	4.60 Ac.
Post-10	11.84 Ac.	6.38 Ac.	7.15 Ac.	4.40 Ac.	2.75 Ac.
Post-12	15.36 Ac.	15.36 Ac.	9.10 Ac.	8.96 Ac.	N/A
Public Park	4.35 Ac.	4.35 Ac.	2.00 Ac.	0.21 Ac.	N/A

Comparison Table

Pre		Post	
Basin Name	**Area (Ac.)**	**Basin Name**	**Area**
Pre-1	102.61	Post-1	27.25
Pre-2	14.49	Post-2	19.34
Pre-3	2.89	Post-3	12.80
Pre-4	16.99	Post-4	9.49
Pre-5	23.47	Post-5	31.98
Pre-5A	7.85	Post-7	34.56
Pre-6	22.88	Post-8	16.24
Pre-7 OFF	14.59	Post-9	9.58
Pre-8 OFF	6.49	Post-10	11.84
Pre-9 OFF	9.87	Post-12	15.36
Lake Harris	20.89	Post 13	5.20
W-3	6.91	Post 14	3.58
W-4	0.49	Post W-3	6.65
S/W 6-7	4.39	Public Park	4.35
W-5	6.60	Post W5	2.12
W-6	7.94	Post W6	6.79
		Post SW-5	1.96
		*Post WTP	3.23
		Post Lake Harris	25.96
		Pre-7 OFF	14.59
		Pre-8 OFF	6.49
Total =	269.36	Total =	269.36

*Not modeled in the Post Development ICPR. Development to be permitted separately.

Pre vs Post Development Wetland Stages

Node	Storm Event	Pre-Development Stage (ft)	Post-Development Stage (ft)	Pre/Post Difference (ft)
W-3	Mean Annual	67.64	67.64	0
W-3	25yr/96hr	67.68	67.64	-0.04
W-4	Mean Annual	79.71	IMPACTED WETLAND	
W-4	25yr/96hr	85.19	IMPACTED WETLAND	
W-5	Mean Annual	73.48	73.24	-0.24
W-5	25yr/96hr	77.52	75.95	-1.57
W-6	Mean Annual	74.62	74.07	-0.55
W-6	25yr/96hr	77.24	75.95	-1.29
SW-5*	Mean Annual	-	62.71	-
SW-5*	25yr/96hr	-	62.9	-
SW-6/7	Mean Annual	73.49	IMPACTED WETLAND	
SW-6/7	25yr/96hr	76.16	IMPACTED WETLAND	

*Hydraulically connected to Lake Harris

Pre vs Post Development Discharge

Node	Storm Event	Pre-Development Discharge (cfs)	Post-Development Discharge (cfs)	Pre/Post Difference (cfs)
Lake Harris	Mean Annual	178.42	159.59	-18.83
Lake Harris	25yr/24hr	447.43	316.83	-130.6

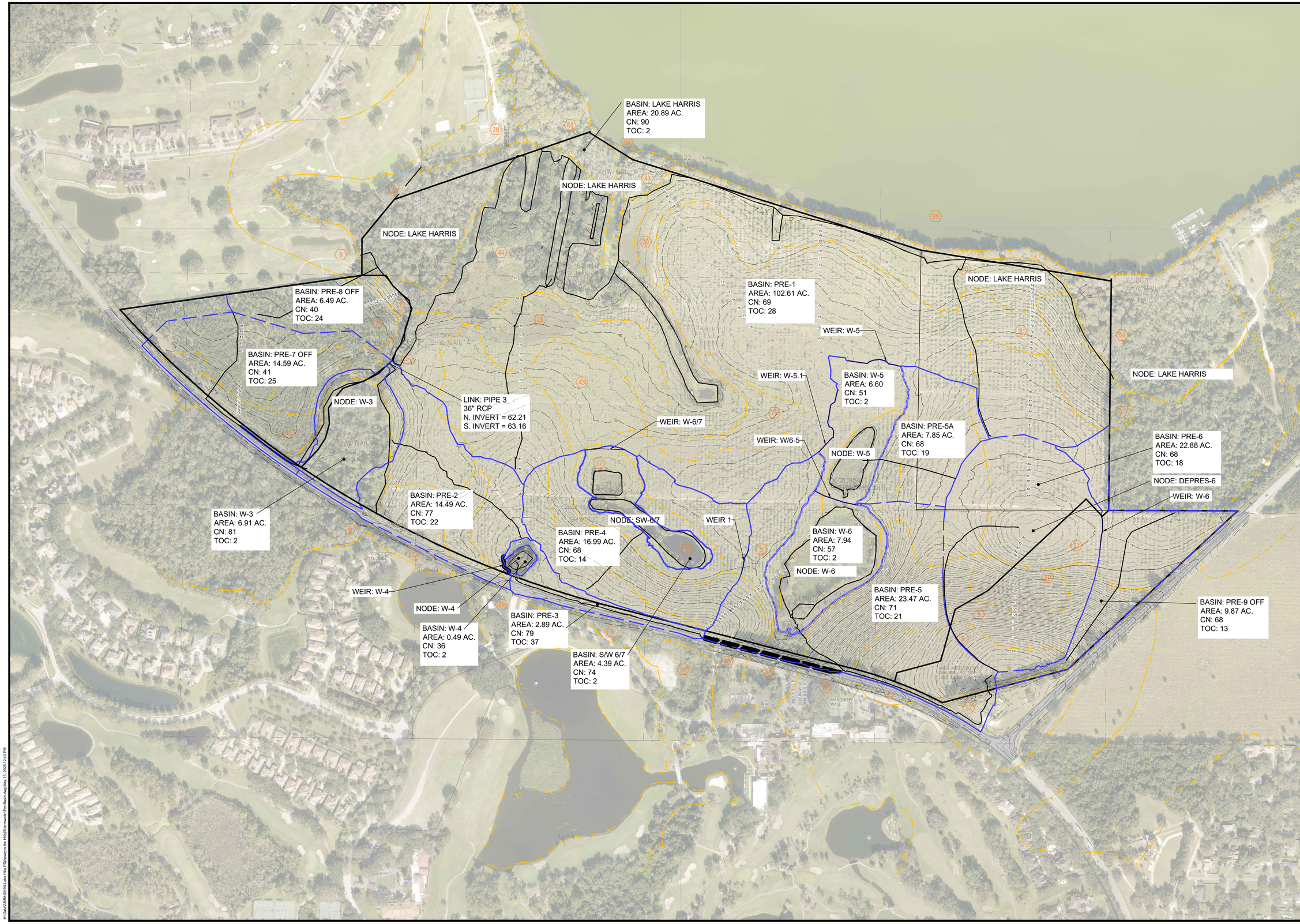
Post Development Pond Stages

Node	Mean Annual Stage(ft)	10yr/24hr Stage (ft)	25yr/24hr Stage (ft)	100yr/24hr Stage (ft)	Top of Pond (ft)
PD1	81.07	82.38	83.61	85.78	90.00
PD2	76.55	76.81	77.21	77.96	78.00
PD3	76.55	76.81	77.2	77.91	78.00
PD4	67.44	67.68	68.08	68.82	69.00
PD5	80.21	80.53	80.93	81.85	83.00
PD7	67.44	67.72	68.27	69.46	70.00
PD8	67.12	67.37	67.73	68.14	69.00
PD9	67.41	67.82	68.37	69.35	71.00
PD10	67.44	67.67	68.04	68.56	69.00
PD12	66.93	67.29	67.86	69.28	70.00

Pre vs Post Nutrient Removal

Pollutant	Pre Loading Rate (kg/yr)	Post Loading Rate (kg/yr)	Pre/Post Difference (cfs)
Phosporus	32.528	20.798	-11.73

Appendix B
Predevelopment Basin Map



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PREDEVELOPMENT BASIN MAP

FOR

LAKE HILLS MAIN BLVD. & MASS GRADING

HOWEY-IN-THE-HILLS FLORIDA

READER & PARTNERS, LLC
5850 TG LEE BOULEVARD, SUITE 200
ORLANDO, FL 32822
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NO.	DATE	REVISIONS
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DAVID ASHLEY STOKES
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NO. 66527
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ENGINEER OF RECORD
May 15, 2025

JOB #	23019
DATE:	5/15/25
DATUM:	NAVD 88
DESIGNED BY:	KAC
DRAWN BY:	JSK
APPROVED BY:	DAS

PRE-1

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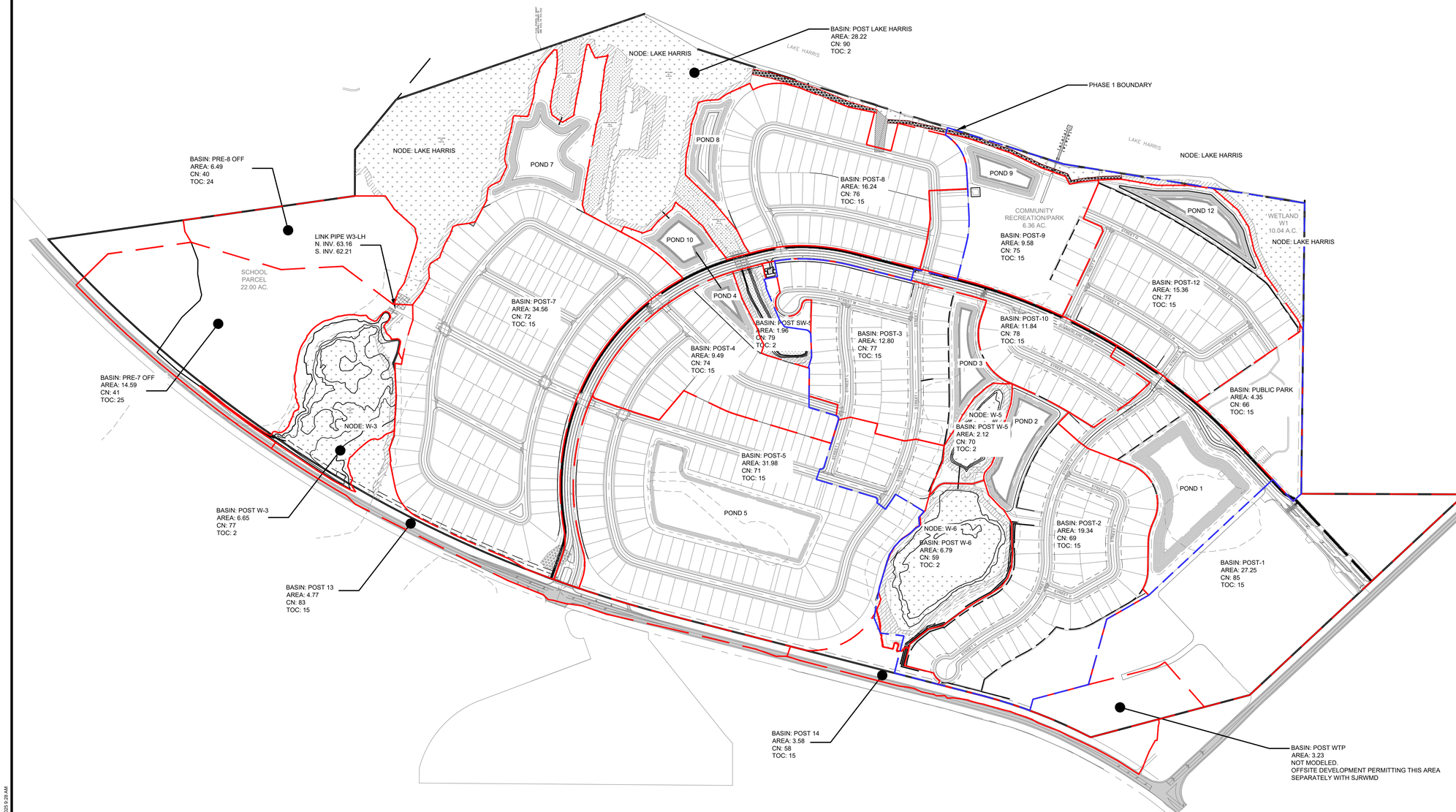
Appendix C
Predevelopment ICPR Node Min/Max Report

Node Max Conditions [PREDEVELOPMENT]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
DEPRES-6	100YR-24HR	85.00	85.20	0.0009	120.86	9.33	163786
Lake Harris	100YR-24HR	63.63	62.63	0.0000	643.68	0.00	0
SW-6/7	100YR-24HR	77.00	76.19	0.0010	135.07	10.65	120390
W-3	100YR-24HR	71.00	68.15	-0.0787	144.86	86.03	112179
W-4	100YR-24HR	90.00	85.04	0.0010	12.01	0.00	14858
W-5	100YR-24HR	79.00	77.43	0.0010	73.38	0.00	94937
W-6	100YR-24HR	79.00	77.17	0.0005	148.62	0.00	274496
DEPRES-6	10YR-24HR	85.00	84.29	0.0010	49.93	0.00	130497
Lake Harris	10YR-24HR	63.63	62.63	0.0000	321.12	0.00	0
SW-6/7	10YR-24HR	77.00	74.83	0.0009	57.68	0.00	81955
W-3	10YR-24HR	71.00	67.64	-0.0787	66.41	86.03	185
W-4	10YR-24HR	90.00	81.48	0.0010	5.70	0.00	11101
W-5	10YR-24HR	79.00	74.80	0.0009	25.28	0.00	49742
W-6	10YR-24HR	79.00	75.45	0.0007	58.11	0.00	202011
DEPRES-6	25YR-24HR	85.00	84.97	0.0010	73.59	0.00	162490
Lake Harris	25YR-24HR	63.63	62.63	0.0000	441.75	0.00	0
SW-6/7	25YR-24HR	77.00	75.88	0.0010	83.63	0.00	101646
W-3	25YR-24HR	71.00	67.64	-0.0787	91.85	86.03	76239
W-4	25YR-24HR	90.00	82.80	0.0010	7.85	0.00	12255
W-5	25YR-24HR	79.00	75.80	0.0010	40.80	0.00	58847
W-6	25YR-24HR	79.00	76.08	0.0006	87.99	0.00	234866
DEPRES-6	25YR-96HR	85.00	85.15	0.0008	77.97	5.06	163786
Lake Harris	25YR-96HR	63.63	62.63	0.0000	490.57	0.00	0
SW-6/7	25YR-96HR	77.00	76.16	0.0010	83.67	5.81	118056
W-3	25YR-96HR	71.00	67.68	-0.0787	98.02	86.03	78703
W-4	25YR-96HR	90.00	85.19	0.0010	8.29	0.00	15017
W-5	25YR-96HR	79.00	77.52	0.0010	45.55	0.00	99082
W-6	25YR-96HR	79.00	77.24	0.0005	102.57	0.00	277358
DEPRES-6	MEAN	85.00	83.26	0.0010	23.66	0.00	83785
Lake Harris	MEAN	63.63	62.63	0.0000	178.41	0.00	0
SW-6/7	MEAN	77.00	73.49	0.0006	28.45	0.00	75990
W-3	MEAN	71.00	67.64	-0.0787	37.92	86.03	185
W-4	MEAN	90.00	79.71	0.0010	3.19	0.00	7892
W-5	MEAN	79.00	73.48	0.0006	9.22	0.00	38229
W-6	MEAN	79.00	74.62	0.0006	27.79	0.00	155907

Appendix D
Postdevelopment Basin Map



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POSTDEVELOPMENT BASIN MAP

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ENGINEER OF RECORD

June 4, 2025

JOB # 23019
DATE: 6/4/25
DATUM: NAVD 88
DESIGNED BY: KAC
DRAWN BY: JSK
APPROVED BY: DAS

POST-1

Appendix E
Postdevelopment Phase 1 Hydrology Calculations

Project:	**Lake Hills**
Basin:	**Post-1**
Pond:	**Pond-1**
Basin Area:	**27.25 ac**

Land Use Table:

Area (ac)	*Land Use*	*CN*
7.93	Proposed Pavement/Sidewalk (Commercial)	98
2.81	Proposed Pavement/Sidewalk (Residential)	98
0.92	Impervious Lot (Residential)	98
6.38	Outparcels (80% Impervious)	98
1.41	Impervious Lot (Commercial)	98
5.85	Pervious/Landscape (HSG-A)	39
1.94	Pond Surface Area	100
Composite CN		85

DCIA% (Lot Impervios is assumed 20% DCIA)	65%
Non-DCIA CN	62

SJRWMD Water Quality Presumptive Criteria:

1" over the basin area:		2.271 AF
1.25" over impervious area + 0.5" over basin area		3.162 AF
	Design WQ	3.162 AF
100Y/24H Volume		21.950 AF
Controlling Volume:		21.950 AF
Stage at Control Elevation:		86.56 FT
Proposed Weir Elevation:		N/A

Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
90.00	3.81	3.724	34.030
89.00	3.64	3.553	30.306
88.00	3.47	3.384	26.753
87.00	3.30	3.217	23.369
86.00	3.13	3.054	20.152
85.00	2.97	2.893	17.098
84.00	2.81	2.736	14.205
83.00	2.66	2.583	11.469
82.00	2.51	2.435	8.886
81.00	2.36	2.290	6.451
80.00	2.22	2.149	4.161
79.00	2.08	2.012	2.012
78.00	1.94	0.000	0.000

Project:	**Lake Hills**
Basin:	**Post-2**
Pond:	**Pond-2**
Basin Area:	**19.34 ac**

Land Use Table:

Area (ac)	*Land Use*	*CN*
1.85	Proposed Pavement/Sidewalk	98
6.65	Impervious Lot	98
9.51	Pervious/Landscape (HSG-A)	39
1.34	Wet Pond Water Surface	100
Composite CN		69

DCIA% (Lot Impervios is assumed 20% DCIA)	16%
Non-DCIA CN	63

SJRWMD Water Quality Presumptive Criteria:

1" over the basin area:		1.612 AF
2.5" over impervious		1.769 AF
	Design WQ	1.769 AF
Treatment Volume Elevation		See Pond 2 and Pond 3 Calcs
Proposed Weir Elevation:		See Pond 2 and Pond 3 Calcs

Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
78.00	1.69	1.631	4.538
77.00	1.57	1.512	2.907
76.00	1.45	1.395	1.395
75.00	1.34	0.000	0.000

Permanent Pool Volume:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
75.00	1.34	1.282	6.497
74.00	1.23	1.171	5.215
73.00	1.12	1.090	4.045
72.00	1.06	1.037	2.955
71.00	1.01	1.918	1.918
69.00	0.91	0.000	0.000

PPV REQUIREMENTS PROVIDED WITH POND 2 AND POND 3 CALCS

Project:	**Lake Hills**
Basin:	**Post-3**
Pond:	**Pond-3**
Basin Area:	**12.80 ac**

Land Use Table:

Area (ac)	*Land Use*	*CN*
1.55	Proposed Pavement/Sidewalk	98
5.99	Impervious Lot	98
4.45	Pervious/Landscape (HSG-A)	39
0.81	Wet Pond Water Surface	100
Composite CN		78

DCIA% (Lot Impervios is assumed 20% DCIA)	21%
Non-DCIA CN	72

SJRWMD Water Quality Presumptive Criteria:

1" over the basin area:		1.067 AF
2.5" over impervious		1.571 AF
	Design WQ	1.571 AF
Treatment Volume Elevation:		See Pond 2 and Pond 3 Calcs
Proposed Weir Elevation:		See Pond 2 and Pond 3 Calcs

Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
78.00	1.15	1.089	2.930
77.00	1.03	0.975	1.841
76.00	0.92	0.866	0.866
75.00	0.81	0.000	0.000

Permanent Pool Volume:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
75.00	0.81	0.762	3.521
74.00	0.71	0.663	2.758
73.00	0.61	0.592	2.095
72.00	0.57	0.546	1.504
71.00	0.52	0.958	0.958
69.00	0.44	0.000	0.000

PPV REQUIREMENTS PROVIDED WITH POND 2 AND POND 3 CALCS

Project:	**Lake Hills**		
Pond:	**Pond-2 and Pond-3**		
Basin Area:	**32.14 ac**		
SJRWMD Water Quality Presumptive Criteria:			
1" over the basin area:	Inc. Post Basins (2, 3)		2.679 AF
2.5" over impervious	Inc. Post Basins (2, 3)		3.340 AF
		Design WQ	3.340 AF
Treatment Volume Elevation			76.48 FT
Proposed Weir Elevation			76.50 FT
Pond 2 Stage/Storage Table:			
Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
78.00	1.69	1.631	4.538
77.00	1.57	1.512	2.907
76.00	1.45	1.395	1.395
75.0 NWL	1.34	0.000	0.000
Permanent Pool Volume			
75.0 NWL	1.34	2.454	6.499
74.00	1.23	1.171	5.215
73.00	1.12	1.090	4.045
72.00	1.06	1.037	2.955
71.00	1.01	1.918	1.918
69.00	0.91	0.000	0.000
Pond 3 Stage/Storage Table:			
Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
78.00	1.15	1.089	2.930
77.00	1.03	0.975	1.841
76.00	0.92	0.866	0.866
75.0 NWL	0.81	0.000	0.000
Permanent Pool Volume			
75.0 NWL	0.81	0.762	3.521
74.00	0.71	0.663	2.758
73.00	0.61	0.592	2.095
72.00	0.57	0.546	1.504
71.00	0.52	0.958	0.958
69.00	0.44	0.000	0.000
Pond 2/3 Stage/Storage Table:			
Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
78.00	2.84	2.720	7.467
77.00	2.60	2.486	4.748
76.00	2.37	2.261	2.261
75.0 NWL	2.15	0.000	0.000
Permanent Pool Volume			
75.0 NWL	2.15	2.044	10.018
74.00	1.94	1.834	7.974
73.00	1.73	1.681	6.140
72.00	1.63	1.582	4.459
71.00	1.53	2.877	2.877
69.00	1.34	0.000	0.000
Permanent Pool Volume Calculation			
Drainage Area	Inc.Post Basins (2,3)		32.14 AC
Compound C Value*			0.60
Wet Season Rainfall			28.00 IN
PPV Required			6.20 AF
PPV Provided			10.02 AF
Mean Depth Calculation			
Mean Depth (between 2-8 feet, ok)			8.2 FT
Residence Time Calculation			
Required Residence Time			21.0 DAYS
Provided Residence Time			34 DAYS

*C value is 0.95 times impervious plus 0.15 times pervious over the entire area.

Project:	**Lake Hills**
Basin:	**Post-5**
Pond:	**Pond-5**
Basin Area:	**31.98 ac**

Land Use Table:

Area (ac)	*Land Use*	*CN*
3.41	Proposed Pavement/Sidewalk	98
12.54	Impervious Lot	98
12.23	Pervious/Landscape (HSG-A)	39
3.80	Pond Surface Area	100
Composite CN		76

DCIA% (Lot Impervios is assumed 20% DCIA)	19%
Non-DCIA CN	71

SJRWMD Water Quality Presumptive Criteria:

1" over the basin area:		2.665 AF
1.25" over impervious area + 0.5" over basin area		2.994 AF
Nutrient Loading Volume 1.12" over the Basin Area		2.985 AF
	Design WQ	2.994 AF
Stage at Control Elevation:		79.77 FT
Proposed Weir Elevation:		80.00 FT

Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
83.00	4.58	4.477	16.730
82.00	4.38	4.279	12.253
81.00	4.18	4.084	7.974
80.00	3.99	3.891	3.891
79.00	3.80	0.000	0.000

Project:	**Lake Hills**
Basin:	**Post-9**
Pond:	**Pond-9**
Basin Area:	**9.58 ac**

Land Use Table:

Area (ac)	*Land Use*	*CN*
4.30	Future Community Recreation Park	98
0.30	Proposed Pavement/Sidewalk	98
0.61	Impervious Lot	98
3.80	Pervious/Landscape (HSG-A)	39
0.56	Wet Pond Water Surface	100
Composite CN		75

DCIA% (Lot Impervios is assumed 20%, Rec Park assumed 50% DCIA)	27%
Non-DCIA CN	72

SJRWMD Water Quality Presumptive Criteria:

1" over the basin area:		0.799 AF
2.5" over impervious		1.087 AF
	Design WQ	1.087 AF
Treatment Volume Elevation:		67.26 FT
Proposed Weir Elevation:		67.30 FT

Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
71.00	0.98	0.935	4.191
70.00	0.89	0.855	3.256
69.00	0.82	0.778	2.401
68.00	0.74	0.703	1.623
67.00	0.67	0.631	0.920
66.00	0.60	0.289	0.289
65.50	0.56	0.000	0.000

Permanent Pool Volume:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
65.50	0.56	0.529	2.334
64.50	0.50	0.465	1.805
63.50	0.43	0.213	1.341
63.00	0.42	1.127	1.127
60.00	0.33	0.000	0.000

Permanent Pool Volume Calculation

Drainage Area	9.58 ac
Compound C Value*	0.54
Wet Season Rainfall	28.00 IN
PPV Required	1.66 AF
PPV Provided	2.33 AF

Mean Depth Calculation	
Mean Depth (between 2-8 feet, ok)	4.2 FT
Residence Time Calculation	
Required Residence Time	21.0 DAYS
Provided Residence Time	31 DAYS
*C value is 0.95 times impervious plus 0.15 times pervious over the entire area.	

Project:	**Lake Hills**
Basin:	**Post-10**
Pond:	**Pond-10**
Basin Area:	**11.84 ac**

Land Use Table:

Area (ac)	*Land Use*	*CN*
4.45	Proposed Pavement/Sidewalk	98
2.70	Impervious Lot	98
4.03	Pervious/Landscape (HSG-A)	39
0.65	Wet Pond Water Surface	100
Composite CN		78

DCIA% (Lot Impervios is assumed 20% DCIA)	42%
Non-DCIA CN	70

SJRWMD Water Quality Presumptive Criteria:

1" over the basin area:		0.986 AF
2.5" over impervious		1.490 AF
	Design WQ	1.490 AF
Treatment Volume Elevation:		See P4, P7, and P10 Calcs
Proposed Weir Elevation:		See P4, P7, and P10 Calcs

Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
69.00	0.93	0.896	3.152
68.00	0.86	0.822	2.256
67.00	0.79	0.751	1.434
66.00	0.72	0.683	0.683
65.00	0.65	0.000	0.000

Permanent Pool Volume:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
65.00	0.65	0.619	3.476
64.00	0.59	0.558	2.857
63.00	0.53	0.514	2.299
62.00	0.50	1.785	1.785
58.00	0.39	0.000	0.000

PPV REQUIREMENTS PROVIDED W/ POND 4, POND 7, AND POND 10 CALCS

Project:	**Lake Hills**		
Pond:	**Pond-4 Pond-7 & Pond-10**		
Total Impervious:	**30.36 ac**		
Basin Area:	**55.88 ac**		
SJRWMD Water Quality Presumptive Criteria:			
1" over the basin area:	Inc. Post Basins (4, 7,10)		4.657 AF
2.5" over impervious	Inc. Post Basins (4, 7,10)		6.324 AF
		Design WQ	6.324 AF
Treatment Volume Elevation:			67.21 FT
Proposed Weir Elevation:			67.40 FT

Pond 4 Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
69.00	0.56	0.520	1.668
68.00	0.48	0.448	1.148
67.00	0.41	0.381	0.700
66.00	0.35	0.319	0.319
65.0 NWL	0.29	0.000	0.000
Permanent Pool Volume			
65.0 NWL	0.29	0.261	1.145
64.00	0.23	0.209	0.884
63.00	0.18	0.173	0.675
62.00	0.16	0.502	0.502
58.00	0.09	0.000	0.000

Pond 7 Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
70.00	2.26	2.187	9.470
69.00	2.11	2.036	7.283
68.00	1.96	1.888	5.247
67.00	1.81	1.746	3.359
66.00	1.68	1.612	1.612
65.0 NWL	1.55	0.000	0.000
Permanent Pool Volume			
65.0 NWL	1.55	1.483	8.641
64.00	1.42	1.359	7.158
63.00	1.30	1.269	5.799
62.00	1.24	4.531	4.531
58.00	1.03	0.000	0.000

Pond 10 Stage/Storage Table:

Stage (FT)	Area (AC)	Δ Vol. (AF)	Σ Vol. (AF)
69.00	0.93	0.896	3.152
68.00	0.86	0.822	2.256
67.00	0.79	0.751	1.434
66.00	0.72	0.683	0.683
65.0 NWL	0.65	0.000	0.000
Permanent Pool Volume			
65.0 NWL	0.65	0.619	3.476

64.00	0.59	0.558	2.857
63.00	0.53	0.514	2.299
62.00	0.50	1.785	1.785
58.00	0.39	0.000	0.000

Pond 4/7/10 Stage/Storage Table:

Stage (FT)	Area (AC)	Δ Vol. (AF)	Σ Vol. (AF)
70.00	2.26	2.187	14.290
69.00	3.60	3.453	12.104
68.00	3.30	3.158	8.651
67.00	3.01	2.878	5.492
66.00	2.74	2.614	2.614
65.0 NWL	2.49	0.00	0.00

Permanent Pool Volume

65.0 NWL	2.49	2.36	13.26
64.00	2.24	2.13	10.90
63.00	2.01	1.96	8.77
62.00	1.90	6.82	6.82
58.00	1.51	0.00	0.00

Permanent Pool Volume Calculation

Drainage Area	Inc. Post Basin (4,7,10)	55.88 AC
Compound C Value*		0.63
Wet Season Rainfall		28.00 IN
PPV Required		11.29 AF
PPV Provided		13.26 AF

Mean Depth Calculation

Mean Depth (between 2-8 feet, ok)	5.3 FT

Residence Time Calculation

Required Residence Time	21.0 DAYS
Provided Residence Time	25 DAYS

*C value is 0.95 times impervious plus 0.15 times pervious over the entire area.

Project:	**Lake Hills**
Basin:	**Post-12**
Pond:	**Pond-12**
Basin Area:	**15.36 ac**

Land Use Table:

Area (ac)	*Land Use*	*CN*
2.16	Proposed Pavement/Sidewalk	98
6.94	Impervious Lot	98
5.38	Pervious/Landscape (HSG-A)	39
0.88	Wet Pond Water Surface	100
Composite CN		77

Combined DCIA Calc (Post 12, Public Park)	
DCIA% (Lot Impervios is assumed 20% DCIA Inc. Public park)	20%
Non-DCIA CN	69

SJRWMD Water Quality Presumptive Criteria:

1" over the basin area:	Inc. Post Basins (12, Public Park)		1.642 AF
2.5" over impervious	Inc. Post Basins (12, Public Park)		2.312 AF
		Design WQ	2.312 AF
Treatment Volume Elevation:			66.79 FT
Proposed Weir Elevation:			66.85 FT

Stage/Storage Table:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
70.00	1.57	1.496	6.619
69.00	1.43	1.358	5.123
68.00	1.29	1.226	3.765
67.00	1.16	1.102	2.539
66.00	1.04	0.986	1.437
65.00	0.93	0.451	0.451
64.50	0.88	0.000	0.000

Permanent Pool Volume:

Stage (FT)	*Area (AC)*	*Δ Vol. (AF)*	*Σ Vol. (AF)*
64.50	0.88	0.825	3.666
63.50	0.77	0.727	2.841
62.50	0.68	0.970	2.113
61.00	0.61	1.143	1.143
59.00	0.53	0.000	0.000
		0.000	0.000
			0.000

Permanent Pool Volume Calculation

Drainage Area	Inc. Post Basins (12, Public Park)	19.71
Compound C Value*		0.64
Wet Season Rainfall		28.00 IN
PPV Required		2.68 AF
PPV Provided		3.67 AF

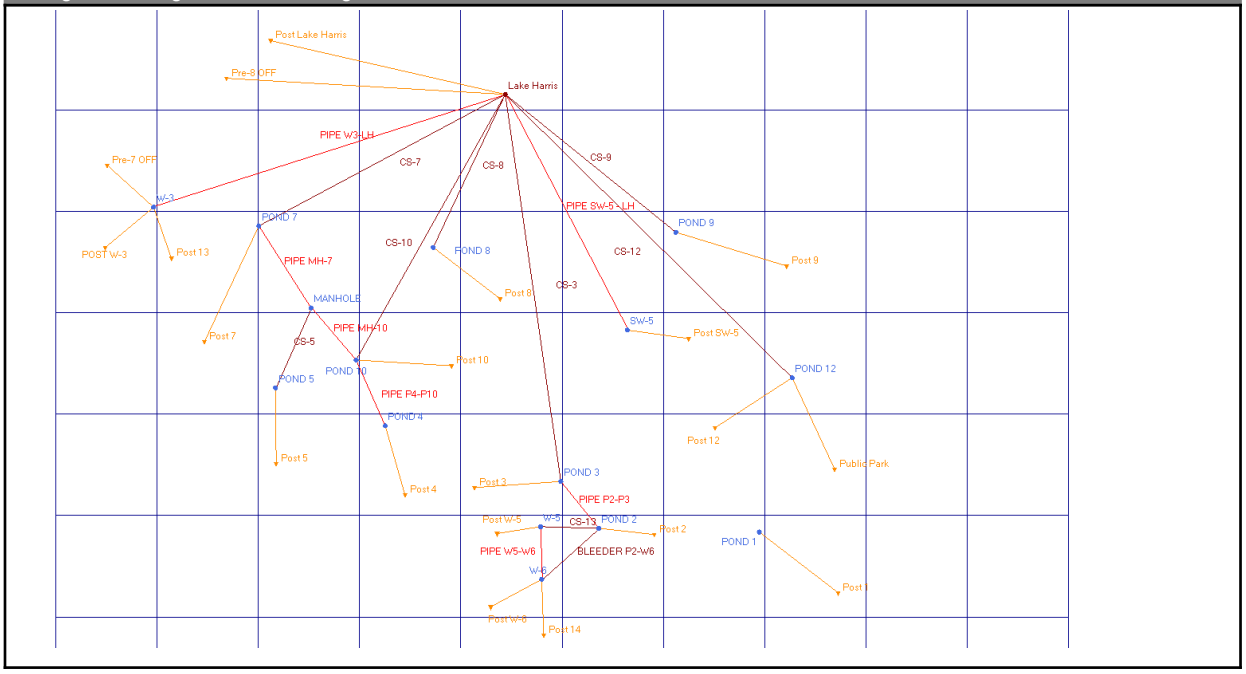
Mean Depth Calculation	
Mean Depth (between 2-8 feet, ok)	4.2 FT
Residence Time Calculation	
Required Residence Time	14.0 DAYS
Provided Residence Time	19 DAYS
*C value is 0.95 times impervious plus 0.15 times pervious over the entire area.	

Basin Public Park

Land Use/Vegetation	Hydric Group	CN	Total Area (Ac.)	CN * Area
Pavement (Impervious)	-	98	2	196
Open Space (Good)	A	39	2.35	91.65
TOTAL AREA			4.35	287.7
			CN =	**66**

Appendix F
Postdevelopment ICPR Node Diagram

Background Image: Post Node Diagram



Appendix G
Postdevelopment Phase 1 ICPR Input Data

Simple Basin: POST W-3

Scenario:	POSTDEVELOPMENT
Node:	W-3
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	6.6500 ac
Curve Number:	77.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 1

Scenario:	POSTDEVELOPMENT
Node:	POND 1
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	27.2500 ac
Curve Number:	85.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 10

Scenario:	POSTDEVELOPMENT
Node:	POND 10
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	11.8400 ac
Curve Number:	78.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 12

Scenario:	POSTDEVELOPMENT
Node:	POND 12
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	15.3600 ac
Curve Number:	77.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 13

Scenario:	POSTDEVELOPMENT
Node:	W-3
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	4.7700 ac
Curve Number:	83.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 14

Scenario:	POSTDEVELOPMENT
Node:	W-6
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	3.5800 ac
Curve Number:	70.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 2

Scenario:	POSTDEVELOPMENT
Node:	POND 2
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	19.3400 ac
Curve Number:	69.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 3

Scenario:	POSTDEVELOPMENT
Node:	POND 3
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	12.8000 ac
Curve Number:	77.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 4

Scenario:	POSTDEVELOPMENT
Node:	POND 4
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	9.4900 ac
Curve Number:	74.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 5

Scenario:	POSTDEVELOPMENT
Node:	POND 5
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	31.9800 ac
Curve Number:	76.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 7

Scenario:	POSTDEVELOPMENT
Node:	POND 7
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	34.5600 ac
Curve Number:	72.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 8

Scenario:	POSTDEVELOPMENT
Node:	POND 8
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	16.2400 ac
Curve Number:	76.0
% Impervious:	0.00
% DCIA:	0.00

% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post 9

Scenario:	POSTDEVELOPMENT
Node:	POND 9
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	9999.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	9.5800 ac
Curve Number:	75.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: Post Lake Harris

Scenario:	POSTDEVELOPMENT
Node:	Lake Harris
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	2.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	28.2200 ac
Curve Number:	90.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

% Direct: 0.00
Rainfall Name:

Comment:

Simple Basin: Public Park

Scenario: POSTDEVELOPMENT
Node: POND 12
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 15.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 4.3500 ac
Curve Number: 66.0
% Impervious: 0.00
% DCIA: 0.00
% Direct: 0.00
Rainfall Name:

Comment:

Node: Lake Harris

Scenario: POSTDEVELOPMENT
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.63 ft
Warning Stage: 63.63 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.63
0	0	0	12.0000	62.63
0	0	0	24.0000	62.63
0	0	0	36.0000	62.63

Comment:

Node: MANHOLE

Scenario: POSTDEVELOPMENT

Appendix H
Postdevelopment ICPR Node Min/Max Report

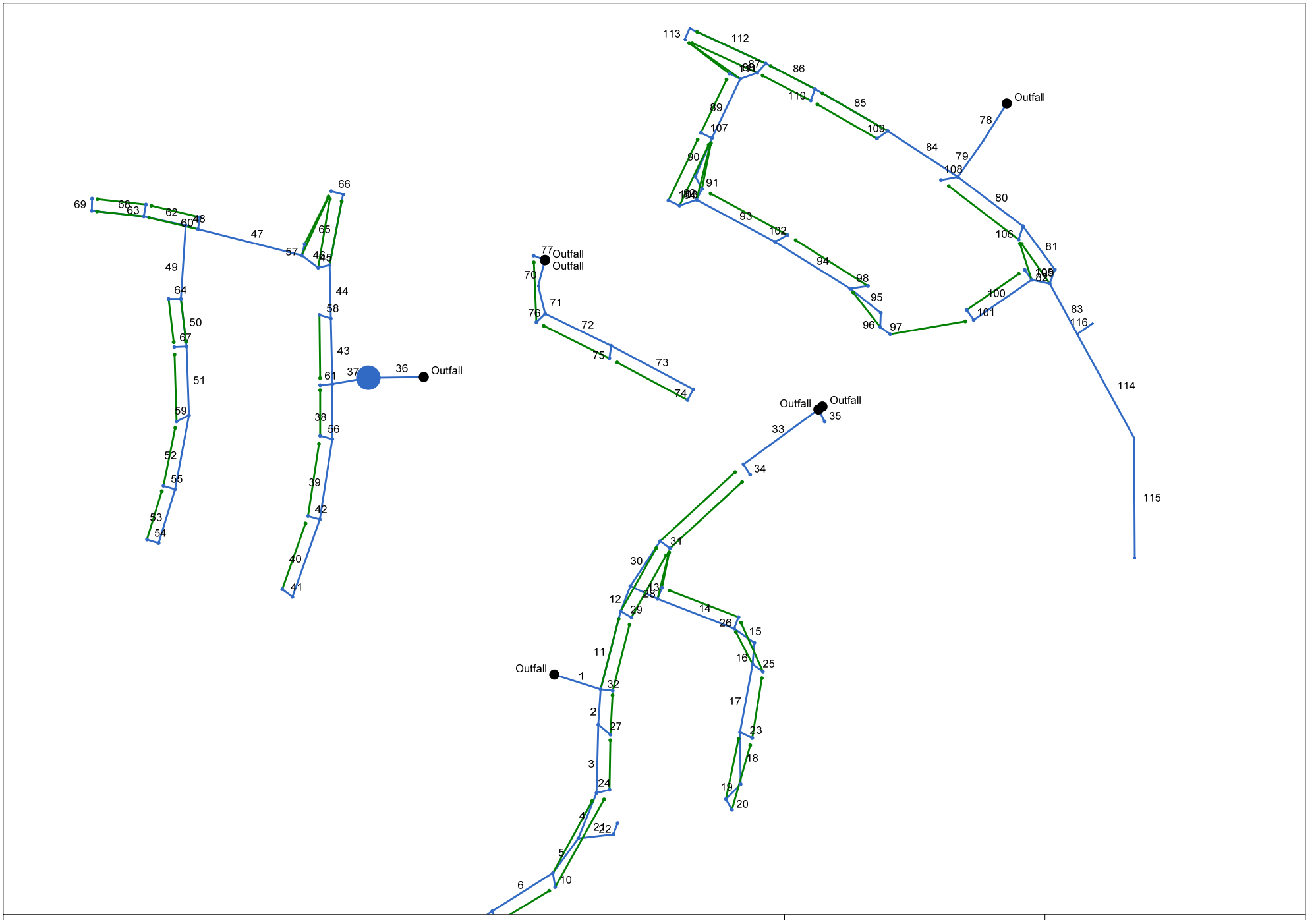
Node Max Conditions [POSTDEVELOPMENT]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Lake Harris	100YR-24HR	63.63	62.63	0.0000	703.72	0.00	0
MANHOLE	100YR-24HR	73.75	68.99	-0.0010	64.66	64.70	1677
POND 1	100YR-24HR	90.00	85.78	0.0010	260.79	0.00	134775
POND 10	100YR-24HR	69.00	68.56	0.0009	196.96	188.26	39178
POND 12	100YR-24HR	70.00	69.28	-0.0010	165.74	43.24	64006
POND 2	100YR-24HR	78.00	77.96	-0.0007	148.62	76.67	73435
POND 3	100YR-24HR	78.00	77.91	0.0007	131.96	103.87	49632
POND 4	100YR-24HR	69.00	68.82	0.0010	79.40	57.33	23773
POND 5	100YR-24HR	83.00	81.85	-0.0008	275.62	26.23	189466
POND 7	100YR-24HR	70.00	69.46	0.0010	280.04	120.24	94941
POND 8	100YR-24HR	69.00	68.14	0.0010	139.97	126.34	40670
POND 9	100YR-24HR	71.00	69.35	0.0009	81.38	29.31	36778
SW-5	100YR-24HR	68.00	63.07	-0.0003	13.75	7.70	22095
W-3	100YR-24HR	71.00	67.69	-0.0694	97.56	86.03	78677
W-5	100YR-24HR	79.00	76.04	0.0010	39.79	3.95	61151
W-6	100YR-24HR	79.00	75.75	0.0005	73.41	0.00	218350
Lake Harris	10YR-24HR	63.63	62.63	0.0000	226.43	0.00	0
MANHOLE	10YR-24HR	73.75	67.68	0.0010	11.57	12.73	1681
POND 1	10YR-24HR	90.00	82.38	0.0010	137.45	0.00	111830
POND 10	10YR-24HR	69.00	67.67	0.0009	61.10	22.98	36490
POND 12	10YR-24HR	70.00	67.29	0.0009	77.30	9.99	52178
POND 2	10YR-24HR	78.00	76.81	0.0006	71.82	8.66	67428
POND 3	10YR-24HR	78.00	76.81	0.0006	53.74	8.59	43978
POND 4	10YR-24HR	69.00	67.68	0.0009	36.64	10.10	19934
POND 5	10YR-24HR	83.00	80.53	0.0005	130.70	5.51	178169
POND 7	10YR-24HR	70.00	67.72	0.0010	131.37	17.27	83563
POND 8	10YR-24HR	69.00	67.37	0.0010	66.37	13.05	37591
POND 9	10YR-24HR	71.00	67.82	0.0008	38.07	3.36	31687
SW-5	10YR-24HR	68.00	62.79	-0.0003	6.71	4.59	19837
W-3	10YR-24HR	71.00	67.64	-0.0694	40.71	86.03	184
W-5	10YR-24HR	79.00	74.81	0.0009	9.69	0.00	49831
W-6	10YR-24HR	79.00	74.36	0.0004	28.75	0.00	141315
Lake Harris	25YR-24HR	63.63	62.63	0.0000	316.83	0.00	0
MANHOLE	25YR-24HR	73.75	68.11	0.0010	30.47	30.54	1680
POND 1	25YR-24HR	90.00	83.61	0.0010	180.29	0.00	119876
POND 10	25YR-24HR	69.00	68.04	0.0009	88.48	78.03	37599
POND 12	25YR-24HR	70.00	67.86	0.0009	107.47	29.61	55397
POND 2	25YR-24HR	78.00	77.21	0.0007	100.32	30.38	69480
POND 3	25YR-24HR	78.00	77.20	0.0007	73.70	31.17	45942
POND 4	25YR-24HR	69.00	68.08	0.0009	51.22	23.38	21195
POND 5	25YR-24HR	83.00	80.93	0.0006	180.35	12.96	181518
POND 7	25YR-24HR	70.00	68.27	0.0010	180.15	57.75	87179
POND 8	25YR-24HR	69.00	67.73	0.0010	91.58	52.53	39014
POND 9	25YR-24HR	71.00	68.37	0.0009	52.87	9.20	33508
SW-5	25YR-24HR	68.00	62.88	-0.0003	9.13	5.77	20669
W-3	25YR-24HR	71.00	67.64	-0.0694	58.50	86.03	184

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
W-5	25YR-24HR	79.00	75.56	0.0010	23.17	1.04	56898
W-6	25YR-24HR	79.00	74.88	0.0004	43.52	0.00	169925
Lake Harris	25YR-96HR	63.63	62.63	0.0000	568.65	0.00	0
MANHOLE	25YR-96HR	73.75	68.65	-0.0010	55.01	55.06	1671
POND 1	25YR-96HR	90.00	85.92	0.0010	143.17	0.00	135773
POND 10	25YR-96HR	69.00	68.33	0.0009	140.64	137.06	38501
POND 12	25YR-96HR	70.00	68.73	-0.0010	92.47	40.19	60626
POND 2	25YR-96HR	78.00	77.66	0.0006	83.93	57.84	71872
POND 3	25YR-96HR	78.00	77.64	0.0006	84.13	72.56	48232
POND 4	25YR-96HR	69.00	68.45	0.0009	44.36	37.77	22475
POND 5	25YR-96HR	83.00	81.68	-0.0008	153.41	25.83	188037
POND 7	25YR-96HR	70.00	68.94	0.0010	157.09	97.29	91528
POND 8	25YR-96HR	69.00	67.87	0.0010	77.90	75.26	39567
POND 9	25YR-96HR	71.00	69.06	-0.0010	45.37	19.32	35891
SW-5	25YR-96HR	68.00	62.90	-0.0002	8.41	5.99	20846
W-3	25YR-96HR	71.00	67.64	-0.0694	64.66	86.03	184
W-5	25YR-96HR	79.00	75.95	0.0010	34.97	3.14	60241
W-6	25YR-96HR	79.00	75.95	0.0004	40.04	0.00	229610
Lake Harris	MEAN	63.63	62.63	0.0000	159.59	0.00	0
MANHOLE	MEAN	73.75	67.44	0.0010	6.54	5.70	1678
POND 1	MEAN	90.00	81.07	0.0010	93.98	0.00	103269
POND 10	MEAN	69.00	67.44	0.0008	38.93	7.51	35768
POND 12	MEAN	70.00	66.93	0.0008	47.91	1.33	50179
POND 2	MEAN	78.00	76.55	0.0006	43.68	1.12	66057
POND 3	MEAN	78.00	76.55	0.0006	34.07	7.22	42731
POND 4	MEAN	69.00	67.44	0.0008	22.49	6.38	19207
POND 5	MEAN	83.00	80.21	0.0004	81.97	1.43	175580
POND 7	MEAN	70.00	67.44	0.0009	78.72	2.06	81746
POND 8	MEAN	69.00	67.12	0.0010	41.63	0.89	36611
POND 9	MEAN	71.00	67.41	0.0007	23.62	0.60	30422
SW-5	MEAN	68.00	62.71	-0.0002	4.31	3.26	19123
W-3	MEAN	71.00	67.64	-0.0694	25.60	86.03	184
W-5	MEAN	79.00	73.24	0.0002	5.92	0.00	36777
W-6	MEAN	79.00	74.07	0.0004	15.19	0.00	125173

Appendix I
Secondary Drainage System Calculations (StormSewer)

Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



Project File: POD 1 STORMSEWERS PAYTON.stm	Number of lines: 116	Date: 6/5/2025

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	DP016	49.30	30	Cir	103.35	76.00	79.00	2.903	77.55	81.29	n/a	81.29	End	Curb-Horiz
2	DP014	22.40	24	Cir	75.71	81.86	83.21	1.783	83.14	84.90	n/a	84.90	1	Curb-Horiz
3	DP012	19.36	24	Cir	146.10	83.21	85.44	1.526	84.90	87.02	n/a	87.02 j	2	Curb-Horiz
4	DP010	16.21	24	Cir	104.42	85.94	87.17	1.178	87.13	88.62	n/a	88.62	3	Manhole
5	DP009	13.03	24	Cir	91.39	87.17	87.56	0.427	88.63	89.02	0.49	89.51	4	Curb-Horiz
6	DP007	8.79	24	Cir	152.13	88.06	88.87	0.532	89.51	89.93	0.62	89.93	5	Curb-Horiz
7	DP005	4.58	15	Cir	174.86	89.30	90.35	0.600	90.24	91.29	0.50	91.79	6	Curb-Horiz
8	DP004	1.69	15	Cir	26.00	90.35	90.43	0.308	91.79*	91.81*	0.03	91.84	7	Curb-Horiz
9	DP006	2.08	15	Cir	26.68	89.30	89.39	0.337	89.96	90.05	0.15	90.21	6	Curb-Horiz
10	DP008	2.84	15	Cir	30.86	88.40	88.49	0.292	89.51	89.56	0.10	89.66	5	Curb-Horiz
11	DP023	22.74	30	Cir	172.05	81.86	82.75	0.517	83.51	84.40	1.03	85.42	1	Curb-Horiz
12	DP120	19.61	30	Cir	57.45	83.10	83.30	0.348	85.42	85.52	0.28	85.80	11	Manhole
13	DP035	16.39	24	Cir	63.95	83.30	83.84	0.844	85.80*	86.14*	0.64	86.77	12	Curb-Horiz
14	DP033	14.24	24	Cir	174.55	84.34	86.21	1.071	86.77	87.57	n/a	87.57 j	13	Curb-Horiz
15	DP031	10.28	24	Cir	52.90	85.21	85.60	0.737	87.57*	87.68*	0.15	87.83	14	Manhole
16	DP030	10.30	24	Cir	46.05	85.60	85.85	0.543	87.83*	87.92*	0.22	88.14	15	Curb-Horiz
17	DP028	6.69	18	Cir	147.19	86.30	87.02	0.489	88.14*	88.74*	0.32	89.06	16	Curb-Horiz
18	DP026	1.84	15	Cir	111.25	87.02	87.81	0.710	89.06*	89.15*	0.03	89.18	17	Manhole
19	DP025	1.83	15	Cir	44.79	87.81	88.05	0.536	89.18	89.21	0.05	89.26	18	Curb-Horiz
20	DP024	1.46	15	Cir	26.00	88.05	88.13	0.308	89.26	89.27	0.02	89.30	19	Curb-Horiz
21	DP019	3.35	15	Cir	74.82	87.17	88.00	1.109	88.62	88.77	0.38	89.15	4	Curb-Horiz
22	DP018	0.47	15	Cir	26.00	88.00	88.09	0.346	89.15	89.15	0.00	89.15	21	Curb-Horiz
23	DP027	3.27	15	Cir	29.04	87.02	87.11	0.310	89.06*	89.14*	0.11	89.25	17	Curb-Horiz
24	DP011	1.46	15	Cir	28.41	86.70	86.78	0.282	87.27	87.35	0.11	87.46	3	Curb-Horiz

Project File: POD 1 STORMSEWERS PAYTON.stm | Number of lines: 116 | Run Date: 6/5/2025

NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
25	DP029	1.69	15	Cir	26.84	86.27	86.37	0.373	88.14*	88.16*	0.03	88.19	16	Curb-Horiz
26	DP032	3.61	15	Cir	26.00	85.62	85.71	0.346	87.57*	87.65*	0.13	87.78	14	Curb-Horiz
27	DP013	1.73	15	Cir	33.70	84.75	84.84	0.267	85.39	85.48	0.12	85.59	2	Curb-Horiz
28	DP034	2.19	15	Cir	26.00	84.75	84.84	0.346	86.77*	86.80*	0.05	86.85	13	Curb-Horiz
29	DP022	1.08	15	Cir	26.29	84.15	84.24	0.342	85.42	85.43	0.01	85.44	11	Curb-Horiz
30	DP021	3.53	15	Cir	115.18	83.30	83.71	0.356	85.80*	86.15*	0.19	86.34	12	Curb-Horiz
31	DP020	1.08	15	Cir	26.00	83.71	83.81	0.385	86.34*	86.35*	0.01	86.36	30	Curb-Horiz
32	DP015	3.11	15	Cir	26.00	83.26	83.36	0.385	84.09	84.19	0.20	84.39	1	Curb-Horiz
33	DP046	6.51	18	Cir	208.35	81.20	81.86	0.317	82.19*	83.48*	0.32	83.80	End	Curb-Horiz
34	DP045	4.07	15	Cir	26.01	81.86	81.96	0.384	83.80*	83.90*	0.17	84.07	33	Curb-Horiz
35	DP047	2.04	15	Cir	28.78	81.20	81.28	0.278	82.09	82.12	0.08	82.21	End	Curb-Horiz
36	DP056	39.04	54	Cir	117.74	67.50	68.00	0.425	75.40*	75.45*	0.02	75.46	End	Manhole
37	DP055	39.33	54	Cir	77.55	68.00	68.40	0.516	75.46*	75.50*	0.15	75.65	36	Curb-Horiz
38	DP054	9.70	18	Cir	117.76	72.86	74.82	1.664	75.65*	76.65*	0.70	77.35	37	Curb-Horiz
39	DP052	5.46	15	Cir	173.44	75.32	78.06	1.580	77.35	79.01	n/a	79.01 j	38	Curb-Horiz
40	DP050	1.14	15	Cir	175.45	78.06	78.90	0.479	79.01	79.33	0.21	79.55	39	Curb-Horiz
41	DP049	1.00	15	Cir	26.98	78.90	79.00	0.371	79.55	79.56	0.06	79.61	40	Curb-Horiz
42	DP051	2.23	15	Cir	26.01	78.06	78.16	0.384	79.01	79.03	0.09	79.13	39	Curb-Horiz
43	DP065	26.22	54	Cir	140.00	68.40	68.70	0.214	75.65*	75.67*	0.06	75.73	37	Curb-Horiz
44	DP063	25.45	42	Cir	114.29	68.90	69.80	0.787	75.73*	75.81*	0.20	76.01	43	Curb-Horiz
45	DP062	23.06	42	Cir	25.16	69.80	69.90	0.397	76.01*	76.02*	0.11	76.13	44	Curb-Horiz
46	DP082	22.56	42	Cir	43.79	69.90	70.20	0.685	76.13*	76.15*	0.12	76.27	45	Curb-Horiz
47	DP080	22.25	42	Cir	227.47	70.20	70.78	0.255	76.27*	76.39*	0.12	76.51	46	Curb-Horiz
48	DP076	19.92	42	Cir	27.42	70.78	70.88	0.365	76.51*	76.52*	0.07	76.59	47	Manhole

Project File: POD 1 STORMSEWERS PAYTON.stm | Number of lines: 116 | Run Date: 6/5/2025

NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
49	DP075	14.87	36	Cir	157.04	70.88	71.35	0.299	76.59*	76.66*	0.10	76.77	48	Curb-Horiz
50	DP073	11.48	24	Cir	102.31	71.35	72.19	0.821	76.77*	77.03*	0.31	77.34	49	Curb-Horiz
51	DP071	5.06	18	Cir	147.24	72.19	73.95	1.195	77.34*	77.69*	0.18	77.86	50	Curb-Horiz
52	DP069	2.83	15	Cir	160.77	74.35	75.37	0.634	77.86*	78.17*	0.12	78.29	51	Curb-Horiz
53	DP067	1.22	15	Cir	120.00	76.07	77.76	1.408	78.29	78.36	0.10	78.46	52	Curb-Horiz
54	DP066	0.19	15	Cir	26.00	77.76	78.16	1.538	78.46	78.33	n/a	78.33	53	Curb-Horiz
55	DP068	0.23	15	Cir	26.00	75.37	75.57	0.769	78.29*	78.30*	0.00	78.30	52	Curb-Horiz
56	DP053	2.23	15	Cir	26.62	75.32	75.42	0.376	77.35*	77.39*	0.05	77.44	38	Curb-Horiz
57	DP081	0.88	15	Cir	25.00	74.43	74.53	0.400	76.27*	76.28*	0.01	76.29	46	Curb-Horiz
58	DP064	0.65	15	Cir	25.27	74.01	74.11	0.396	75.73*	75.74*	0.00	75.74	43	Curb-Horiz
59	DP070	0.27	15	Cir	29.58	73.95	74.15	0.676	77.86*	77.86*	0.00	77.86	51	Curb-Horiz
60	DP079	2.38	15	Cir	26.12	73.71	73.81	0.383	76.51*	76.54*	0.06	76.60	47	Curb-Horiz
61	DP057	3.46	15	Cir	26.08	73.30	73.38	0.307	75.65*	75.72*	0.12	75.85	37	Curb-Horiz
62	DP078	5.90	36	Cir	91.16	70.88	71.10	0.241	76.59*	76.59*	0.02	76.62	48	Curb-Horiz
63	DP077	1.61	15	Cir	26.00	72.85	72.95	0.385	76.62*	76.63*	0.03	76.66	62	Curb-Horiz
64	DP074	2.23	15	Cir	26.03	72.71	72.81	0.384	76.77*	76.80*	0.05	76.85	49	Curb-Horiz
65	DP059	2.05	15	Cir	153.53	72.20	72.70	0.326	76.01*	76.17*	0.07	76.23	44	Curb-Horiz
66	DP058	0.36	15	Cir	26.00	72.70	72.80	0.385	76.23*	76.23*	0.00	76.23	65	Curb-Horiz
67	DP072	4.07	15	Cir	26.16	72.19	72.29	0.382	77.34*	77.45*	0.17	77.62	50	Curb-Horiz
68	DP118	4.46	36	Cir	111.16	71.10	71.38	0.252	76.62*	76.62*	0.01	76.63	62	Curb-Horiz
69	DP117	3.69	24	Cir	26.00	71.58	71.67	0.346	76.63*	76.64*	0.02	76.66	68	Curb-Horiz
70	DP042	14.13	24	Cir	56.87	75.17	75.55	0.668	82.78*	83.00*	0.17	83.17	End	Manhole
71	DP041	14.16	24	Cir	61.42	75.55	75.86	0.505	83.17*	83.41*	0.42	83.83	70	Curb-Horiz
72	DP039	9.92	24	Cir	156.04	75.86	76.69	0.532	83.83*	84.13*	0.22	84.35	71	Curb-Horiz

Project File: POD 1 STORMSEWERS PAYTON.stm | Number of lines: 116 | Run Date: 6/5/2025

NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
73	DP037	5.00	15	Cir	197.80	77.42	78.55	0.571	84.35*	85.54*	0.39	85.93	72	Curb-Horiz
74	DP036	2.08	15	Cir	26.02	78.55	78.64	0.346	85.93*	85.96*	0.04	86.00	73	Curb-Horiz
75	DP038	2.46	15	Cir	27.27	77.42	77.52	0.367	84.35*	84.39*	0.06	84.46	72	Curb-Horiz
76	DP040	2.58	15	Cir	26.00	76.26	76.36	0.385	83.83*	83.87*	0.07	83.94	71	Curb-Horiz
77	DP043	2.90	15	Cir	26.00	75.57	75.67	0.385	82.78*	82.83*	0.09	82.92	End	Curb-Horiz
78	DP098	48.41	36	Cir	94.62	60.00	61.30	1.376	66.17*	66.67*	0.11	66.78	End	None
79	DP097	48.55	36	Cir	93.69	62.50	63.80	1.388	66.78*	67.28*	1.22	68.49	78	Curb-Horiz
80	DP107	20.95	24	Cir	173.70	67.70	68.83	0.651	69.70*	71.19*	0.99	72.18	79	Curb-Horiz
81	DP109	18.94	18	Cir	114.95	69.24	70.00	0.661	72.18*	75.92*	2.29	78.21	80	Curb-Horiz
82	DP108	17.37	18	Cir	31.95	70.00	70.08	0.250	78.21*	79.08*	2.24	81.32	81	Curb-Horiz
83	DP119 (4)	10.02	18	Cir	122.51	70.08	70.51	0.351	81.32*	82.44*	0.75	83.19	82	DropGrate
84	DP095	25.49	36	Cir	178.19	63.80	64.40	0.337	68.49*	68.75*	0.29	69.04	79	Curb-Horiz
85	DP093	23.99	36	Cir	178.86	64.40	65.00	0.335	69.04*	69.27*	0.27	69.54	84	Curb-Horiz
86	DP091	20.65	30	Cir	118.13	65.00	65.45	0.381	69.54*	69.84*	0.40	70.24	85	Curb-Horiz
87	DP119	17.14	30	Cir	27.00	65.45	65.55	0.370	70.24*	70.29*	0.15	70.44	86	Curb-Horiz
88	DP088	15.90	30	Cir	38.01	65.55	66.16	1.605	70.44*	70.49*	0.18	70.68	87	Curb-Horiz
89	DP086	14.33	30	Cir	140.20	66.16	69.31	2.247	70.68	70.74	0.57	71.31	88	Curb-Horiz
90	DP084	12.27	30	Cir	89.39	69.31	70.12	0.908	71.31	71.30	n/a	71.30 j	89	Manhole
91	DP119 (6)	11.96	30	Cir	29.70	70.12	70.39	0.909	71.30	71.55	n/a	71.55 j	90	Curb-Horiz
92	DP114	9.66	30	Cir	26.00	70.39	70.63	0.923	71.55	71.67	n/a	71.67 j	91	Curb-Horiz
93	DP113	7.13	24	Cir	189.37	70.63	72.35	0.908	71.67	73.30	n/a	73.30 j	92	Curb-Horiz
94	DP111	2.79	15	Cir	188.12	72.35	74.05	0.904	73.30	74.72	n/a	74.72 j	93	Curb-Horiz
95	DP119 (5)	0.61	18	Cir	83.50	74.05	74.81	0.908	74.72	75.10	n/a	75.10 j	94	Manhole
96	DP100	0.63	15	Cir	30.04	74.81	75.08	0.899	75.10	75.39	0.14	75.39	95	Curb-Horiz

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NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
97	DP099	0.31	15	Cir	26.00	75.08	75.32	0.923	75.39	75.53	n/a	75.53 j	96	Curb-Horiz
98	DP110	1.35	15	Cir	38.39	75.07	75.17	0.260	75.63	75.73	0.10	75.83	94	Curb-Horiz
99	DP104	7.43	18	Cir	39.43	70.08	72.10	5.124	81.32*	81.52*	0.45	81.97	82	Curb-Horiz
100	DP102	5.13	15	Cir	150.17	72.10	74.06	1.305	81.97*	82.92*	0.41	83.33	99	Curb-Horiz
101	DP101	1.15	15	Cir	26.00	74.06	74.16	0.385	83.33*	83.33*	0.01	83.35	100	Curb-Horiz
102	DP112	2.69	15	Cir	30.47	73.77	73.87	0.328	74.56	74.66	0.17	74.83	93	Curb-Horiz
103	DP115	0.66	18	Cir	38.30	72.00	72.12	0.313	72.34	72.46	0.08	72.54	92	Curb-Horiz
104	DP083	0.27	15	Cir	25.95	73.27	73.37	0.385	73.49	73.59	0.05	73.64	103	Curb-Horiz
105	DP103	0.46	15	Cir	26.00	72.10	72.20	0.385	81.97*	81.97*	0.00	81.97	99	Curb-Horiz
106	DP106	0.58	15	Cir	30.23	70.44	70.53	0.298	72.18*	72.18*	0.00	72.18	80	Curb-Horiz
107	DP085	2.04	15	Cir	26.00	70.21	70.31	0.385	71.31	71.33	0.06	71.38	89	Curb-Horiz
108	DP096	3.69	15	Cir	36.40	70.01	70.12	0.302	71.09	71.19	0.17	71.36	79	Curb-Horiz
109	DP094	1.31	15	Cir	28.00	68.22	68.32	0.357	69.04	69.05	0.05	69.10	84	Curb-Horiz
110	DP092	2.04	15	Cir	26.29	67.25	67.35	0.380	69.54*	69.56*	0.04	69.61	85	Curb-Horiz
111	DP087	1.81	15	Cir	25.95	67.06	67.16	0.385	70.68*	70.70*	0.03	70.73	88	Curb-Horiz
112	DP090	2.76	15	Cir	178.28	66.30	66.91	0.342	70.24*	70.57*	0.12	70.68	86	Curb-Horiz
113	DP089	0.46	15	Cir	25.95	66.91	67.01	0.385	70.68*	70.69*	0.00	70.69	112	Curb-Horiz
114	DP119 (2)	6.92	18	Cir	252.28	70.51	75.71	2.061	83.19*	84.28*	0.19	84.47	83	DropGrate
115	DP119 (1)	3.72	18	Cir	256.52	75.71	81.00	2.062	84.47*	84.79*	0.07	84.86	114	DropGrate
116	DP119 (3)	1.33	18	Cir	39.56	70.51	70.65	0.354	83.19*	83.19*	0.01	83.20	83	DropGrate

Project File: POD 1 STORMSEWERS PAYTON.stm | Number of lines: 116 | Run Date: 6/5/2025

NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
1	DS023	2.84	0.55	2.55	0.85	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.23	11.28	0.30	6.70	2.0	11
2	DS021	1.73	0.55	1.73	0.55	Curb	6.0	9.50	0.00	0.00	0.00	0.016	2.00	0.020	0.020	0.013	0.17	8.32	0.26	4.87	2.0	1
3	DS019	2.04	0.24	1.73	0.55	Curb	6.0	9.50	0.00	0.00	0.00	0.016	2.00	0.020	0.020	0.013	0.17	8.31	0.26	4.87	2.0	2
4	DS018	0.04	0.00	0.00	0.04	MH	6.0	9.50	0.00	2.00	0.00	Sag	2.00	0.000	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
5	DS016	1.81	0.50	2.07	0.24	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.21	10.39	0.26	4.42	2.0	3
6	DS014	2.34	0.61	2.45	0.50	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.23	11.40	0.28	5.85	2.0	5
7	DS013	2.92	0.00	2.32	0.61	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.21	10.66	0.28	5.92	2.0	6
8	DS012	1.69	0.00	1.58	0.11	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.17	8.69	0.23	3.10	2.0	9
9	DS015	2.08	0.11	1.99	0.19	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.20	10.18	0.25	4.12	2.0	10
10	DS017	2.84	0.19	2.50	0.54	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.23	11.53	0.29	6.02	2.0	24
11	DS031	2.50	0.85	2.66	0.68	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.24	11.95	0.30	6.58	2.0	30
12	DS045	0.04	0.00	0.00	0.04	MH	6.0	9.50	0.00	2.00	0.00	Sag	2.00	0.000	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
13	DS043	0.38	0.00	0.38	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.11	5.31	0.17	0.01	2.0	31
14	DS041	0.73	0.26	0.99	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.15	7.57	0.17	0.01	2.0	13
15	DS040	0.04	0.00	0.00	0.04	MH	6.0	9.50	0.00	2.00	0.00	Sag	2.00	0.000	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
16	DS038	2.27	0.10	2.11	0.26	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.21	10.50	0.26	4.59	2.0	14
17	DS036	1.88	0.00	1.78	0.10	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.19	9.63	0.23	3.25	2.0	16
18	DS035	0.04	0.00	0.00	0.04	MH	6.0	9.50	0.00	2.00	0.00	Sag	2.00	0.000	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
19	DS034	0.38	0.00	0.38	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.10	4.99	0.17	0.01	2.0	17
20	DS033	1.46	0.00	1.41	0.05	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.16	8.22	0.21	2.32	2.0	23
21	DS027	2.98	0.00	2.47	0.51	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.23	11.44	0.28	5.90	2.0	Off
22	DS028	0.47	0.00	0.47	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.11	5.72	0.17	0.01	2.0	Off
23	DS037	3.27	0.05	2.65	0.67	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.24	11.91	0.30	6.53	2.0	25

Project File: New.stm | Number of lines: 116 | Run Date: 4/30/2025

NOTES: Inlet N-Values = 0.016; Intensity = 12.4956 + -1.6712(X) + -0.3490(X)^2 + 0.0502(X)^3 -- X = Inlet time (min); Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
24	DS020	1.46	0.54	1.59	0.41	Curb	6.0	9.50	0.00	0.00	0.00	0.016	2.00	0.020	0.020	0.013	0.16	7.92	0.25	4.37	2.0	27
25	DS039	1.69	0.67	2.10	0.26	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.21	10.48	0.26	4.56	2.0	26
26	DS042	3.61	0.26	2.92	0.95	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.25	12.62	0.32	7.44	2.0	28
27	DS022	1.73	0.41	1.66	0.48	Curb	6.0	9.50	0.00	0.00	0.00	0.016	2.00	0.020	0.020	0.013	0.16	8.12	0.26	4.63	2.0	32
28	DS044	2.19	0.95	2.55	0.58	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.23	11.66	0.29	6.20	2.0	31
29	DS032	1.08	0.95	1.88	0.15	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.20	9.91	0.24	3.69	2.0	31
30	DS030	2.50	0.68	2.39	0.79	Curb	6.0	9.50	0.00	0.00	0.00	0.008	2.00	0.020	0.020	0.013	0.21	10.73	0.29	6.37	2.0	33
31	DS029	1.08	0.73	1.64	0.17	Curb	6.0	9.50	0.00	0.00	0.00	0.008	2.00	0.020	0.020	0.013	0.17	8.68	0.24	3.57	2.0	34
32	DS024	3.11	0.48	2.64	0.95	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.23	11.52	0.31	7.01	2.0	29
33	DS057	2.46	0.79	3.25	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.18	8.96	0.35	8.96	2.0	Off
34	DS056	4.07	0.17	4.24	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.21	10.71	0.38	10.71	2.0	Off
35	DS059	1.11	0.00	1.11	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.16	7.91	0.17	0.01	2.0	Off
36	DS068	0.04	0.00	0.00	0.04	MH	6.0	9.50	0.00	0.00	0.00	Sag	2.00	0.000	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
37	DS067	3.46	1.14	4.60	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.23	11.29	0.39	11.29	2.0	Off
38	DS065	2.54	0.73	2.13	1.14	Curb	6.0	9.50	0.00	0.00	0.00	0.017	2.00	0.020	0.020	0.013	0.19	9.41	0.29	6.34	2.0	37
39	DS063	2.58	0.00	1.85	0.73	Curb	6.0	9.50	0.00	0.00	0.00	0.017	2.00	0.020	0.020	0.013	0.17	8.61	0.27	5.37	2.0	38
40	DS062	0.15	0.00	0.15	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.08	3.77	0.17	0.01	2.0	39
41	DS061	1.00	0.00	1.00	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.15	7.60	0.17	0.01	2.0	42
42	DS064	2.23	0.00	1.69	0.54	Curb	6.0	9.50	0.00	0.00	0.00	0.017	2.00	0.020	0.020	0.013	0.16	8.16	0.26	4.80	2.0	56
43	DS078	0.69	0.00	0.69	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.13	6.62	0.17	0.01	2.0	37
44	DS076	0.92	0.00	0.92	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.15	7.37	0.17	0.01	2.0	65
45	DS077	0.77	0.00	0.77	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.14	6.89	0.17	0.01	2.0	66
46	DS095	0.27	0.00	0.27	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.09	4.49	0.17	0.01	2.0	66

Project File: New.stm | Number of lines: 116 | Run Date: 4/30/2025

NOTES: Inlet N-Values = 0.016; Intensity = 12.4956 + -1.6712(X) + -0.3490(X)^2 + 0.0502(X)^3 -- X = Inlet time (min); Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
47	DS091	0.50	0.00	0.50	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.11	5.66	0.17	0.01	2.0	62
48	DS090	0.04	0.00	0.00	0.04	MH	6.0	9.50	0.00	2.00	0.00	Sag	2.00	0.000	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
49	DS088	1.85	0.00	1.69	0.16	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.18	8.98	0.24	3.55	2.0	50
50	DS086	3.46	0.51	3.97	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.20	10.23	0.37	10.23	2.0	Off
51	DS084	2.34	0.26	2.25	0.35	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.22	10.88	0.27	5.13	2.0	50
52	DS082	1.61	0.06	1.42	0.26	Curb	6.0	9.50	0.00	0.00	0.00	0.016	2.00	0.020	0.020	0.013	0.15	7.41	0.24	3.69	2.0	51
53	DS081	1.11	0.00	1.05	0.06	Curb	6.0	9.50	0.00	0.00	0.00	0.016	2.00	0.020	0.020	0.013	0.13	6.36	0.21	2.13	2.0	52
54	DS080	0.19	0.00	0.19	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.016	2.00	0.020	0.020	0.013	0.07	3.29	0.17	0.01	2.0	55
55	DS083	0.23	0.00	0.23	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.016	2.00	0.020	0.020	0.013	0.07	3.53	0.17	0.01	2.0	59
56	DS066	2.23	0.54	1.93	0.84	Curb	6.0	9.50	0.00	0.00	0.00	0.017	2.00	0.020	0.020	0.013	0.18	8.85	0.28	5.66	2.0	61
57	DS096	0.88	0.00	0.88	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.14	7.01	0.17	0.01	2.0	66
58	DS079	0.65	0.00	0.65	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.13	6.48	0.17	0.01	2.0	61
59	DS085	0.27	0.00	0.27	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.09	4.65	0.17	0.01	2.0	67
60	DS094	2.38	0.00	2.07	0.32	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.20	10.17	0.26	4.77	2.0	63
61	DS070	3.46	0.84	4.30	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.22	10.80	0.38	10.80	2.0	Off
62	DS093	0.27	0.00	0.27	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.09	4.49	0.17	0.01	2.0	68
63	DS092	1.61	0.32	1.78	0.15	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.19	9.40	0.24	3.63	2.0	69
64	DS089	2.23	0.00	1.93	0.30	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.19	9.64	0.26	4.52	2.0	67
65	DS073	1.77	0.00	1.59	0.18	Curb	6.0	9.50	0.00	0.00	0.00	0.009	2.00	0.020	0.020	0.013	0.17	8.43	0.24	3.59	2.0	Off
66	DS072	0.36	0.00	0.36	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.009	2.00	0.020	0.020	0.013	0.09	4.63	0.17	0.01	2.0	Off
67	DS087	4.07	0.30	4.37	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.22	10.92	0.39	10.92	2.0	Off
68	DS132	0.81	0.00	0.81	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.07	3.54	0.24	3.54	2.0	Off
69	DS133	3.69	0.15	3.84	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.20	10.02	0.37	10.02	2.0	Off

Project File: New.stm | Number of lines: 116 | Run Date: 4/30/2025

NOTES: Inlet N-Values = 0.016; Intensity = 12.4956 + -1.6712(X) + -0.3490(X)^2 + 0.0502(X)^3 -- X = Inlet time (min); Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
70	DS052	0.04	0.00	0.00	0.04	MH	6.0	9.50	0.00	2.00	0.00	Sag	2.00	0.000	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
71	DS051	2.08	0.83	2.43	0.48	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.23	11.33	0.28	5.76	2.0	Off
72	DS049	2.69	0.95	2.81	0.83	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.25	12.34	0.31	7.08	2.0	71
73	DS046	2.96	0.00	2.01	0.95	Curb	6.0	9.50	0.00	0.00	0.00	0.017	2.00	0.020	0.020	0.013	0.18	9.07	0.29	5.93	2.0	72
74	DS047	2.08	0.00	1.61	0.46	Curb	6.0	9.50	0.00	0.00	0.00	0.017	2.00	0.020	0.020	0.013	0.16	7.94	0.26	4.52	2.0	75
75	DS048	2.46	0.46	2.44	0.48	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.23	11.36	0.28	5.79	2.0	76
76	DS050	2.58	0.48	2.51	0.55	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.23	11.56	0.29	6.06	2.0	77
77	DS053	2.90	0.55	2.72	0.73	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.24	12.09	0.30	6.76	2.0	Off
78	DS112	0.04	0.00	0.00	0.04	None	6.0	9.50	0.00	0.00	0.00	Sag	2.00	0.000	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
79	DS110	3.84	0.12	3.96	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.20	10.22	0.37	10.22	2.0	Off
80	DS121	1.69	0.12	1.69	0.12	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.18	9.17	0.23	3.28	2.0	79
81	DS124	1.73	0.00	1.61	0.12	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.18	8.76	0.23	3.22	2.0	80
82	DS123	0.42	0.00	0.42	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.007	2.00	0.020	0.020	0.013	0.10	5.17	0.17	0.01	2.0	106
83	DS142	2.18	0.00	2.18	0.00	DrGrt	0.0	0.00	6.16	2.00	3.08	Sag	2.00	0.050	0.020	0.013	0.17	20.29	0.17	20.29	0.0	Off
84	DS108	1.04	0.00	1.04	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.15	7.45	0.17	0.01	2.0	85
85	DS106	2.38	0.00	2.07	0.32	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.20	10.17	0.26	4.77	2.0	86
86	DS103	1.61	0.32	1.78	0.15	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.19	9.40	0.24	3.63	2.0	112
87	DS134	1.61	0.19	1.69	0.11	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.18	9.16	0.23	3.26	2.0	113
88	DS101	0.38	0.15	0.54	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.020	2.00	0.020	0.020	0.013	0.09	4.64	0.17	0.01	2.0	113
89	DS099	0.65	0.66	1.16	0.15	Curb	6.0	9.50	0.00	0.00	0.00	0.020	2.00	0.020	0.020	0.013	0.13	6.49	0.22	2.90	2.0	88
90	DS145	0.42	0.00	0.00	0.42	MH	6.0	9.50	0.00	2.00	0.00	0.025	2.00	0.020	0.020	0.013	0.00	0.00	0.00	0.00	0.0	Off
91	DS130	2.84	0.39	2.97	0.26	Curb	6.0	9.50	0.00	0.00	0.00	0.004	2.00	0.050	0.020	0.013	0.30	11.76	0.30	3.62	2.0	89
92	DS129	2.58	0.32	2.50	0.40	Curb	6.0	9.50	0.00	0.00	0.00	0.004	2.00	0.020	0.020	0.013	0.24	11.81	0.28	5.60	2.0	89

Project File: New.stm | Number of lines: 116 | Run Date: 4/30/2025

NOTES: Inlet N-Values = 0.016; Intensity = 12.4956 + -1.6712(X) + -0.3490(X)^2 + 0.0502(X)^3 -- X = Inlet time (min); Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
93	DS127	2.54	0.00	2.21	0.32	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.22	10.77	0.27	4.98	2.0	92
94	DS126	1.23	0.00	1.23	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.16	8.21	0.17	0.01	2.0	93
95	DS144	0.00	0.00	0.00	0.00	MH	6.0	9.50	0.00	2.00	0.00	0.000	2.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.0	Off
96	DS115	0.35	0.00	0.35	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.027	2.00	0.020	0.020	0.013	0.07	3.72	0.17	0.01	2.0	94
97	DS114	0.31	0.00	0.31	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.027	2.00	0.020	0.020	0.013	0.07	3.56	0.17	0.01	2.0	100
98	DS125	1.35	0.00	1.34	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.17	8.49	0.19	0.97	2.0	102
99	DS119	2.00	1.38	2.39	0.99	Curb	6.0	9.50	0.00	0.00	0.00	0.010	2.00	0.020	0.020	0.013	0.21	10.53	0.30	6.65	2.0	106
100	DS117	4.04	0.00	2.66	1.38	Curb	6.0	9.50	0.00	0.00	0.00	0.010	2.00	0.020	0.020	0.013	0.23	11.26	0.32	7.53	2.0	99
101	DS116	1.15	0.00	1.13	0.02	Curb	6.0	9.50	0.00	0.00	0.00	0.010	2.00	0.020	0.020	0.013	0.14	7.04	0.20	1.65	2.0	105
102	DS128	2.69	0.00	2.31	0.39	Curb	6.0	9.50	0.00	0.00	0.00	0.005	2.00	0.020	0.020	0.013	0.22	11.02	0.27	5.33	2.0	91
103	DS098	0.42	0.00	0.42	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.025	2.00	0.020	0.020	0.013	0.08	4.07	0.17	0.01	2.0	89
104	DS097	0.27	0.00	0.27	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.025	2.00	0.020	0.020	0.013	0.07	3.44	0.17	0.01	2.0	107
105	DS118	0.46	0.02	0.49	0.00	Curb	6.0	9.50	0.00	0.00	0.00	0.010	2.00	0.020	0.020	0.013	0.10	5.09	0.17	0.01	2.0	Off
106	DS122	0.58	0.99	1.51	0.05	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.17	8.69	0.22	2.46	2.0	108
107	DS100	2.04	0.00	1.55	0.48	Curb	6.0	9.50	0.00	0.00	0.00	0.020	2.00	0.020	0.020	0.013	0.15	7.65	0.26	4.46	2.0	111
108	DS111	3.69	0.05	3.74	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.20	9.85	0.36	9.85	2.0	Off
109	DS109	1.31	0.00	1.30	0.01	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.16	8.12	0.19	1.30	2.0	110
110	DS107	2.04	0.01	1.86	0.19	Curb	6.0	9.50	0.00	0.00	0.00	0.006	2.00	0.020	0.020	0.013	0.19	9.61	0.25	3.95	2.0	87
111	DS102	1.81	0.48	1.67	0.62	Curb	6.0	9.50	0.00	0.00	0.00	0.020	2.00	0.020	0.020	0.013	0.16	7.99	0.26	4.90	2.0	113
112	DS105	2.38	0.15	2.54	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.15	7.59	0.32	7.59	2.0	Off
113	DS104	0.46	0.73	1.20	0.00	Curb	6.0	15.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.09	4.60	0.26	4.60	2.0	Off
114	DS141	3.56	0.00	3.56	0.00	DrGrt	0.0	0.00	6.16	2.00	3.08	Sag	2.00	0.050	0.020	0.013	0.24	26.97	0.24	26.97	0.0	Off
115	DS140	3.72	0.00	3.72	0.00	DrGrt	0.0	0.00	6.16	2.00	3.08	Sag	2.00	0.050	0.020	0.013	0.25	27.65	0.25	27.65	0.0	Off

Project File: New.stm | Number of lines: 116 | Run Date: 4/30/2025

NOTES: Inlet N-Values = 0.016; Intensity = 12.4956 + -1.6712(X) + -0.3490(X)^2 + 0.0502(X)^3 -- X = Inlet time (min); Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q Byp (cfs)	Junc Type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp Line No
							Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
116	DS143	1.33	0.00	1.33	0.00	DrGrt	0.0	0.00	6.16	2.00	3.08	Sag	2.00	0.050	0.020	0.013	0.12	15.48	0.12	15.48	0.0	Off

Project File: New.stm | Number of lines: 116 | Run Date: 4/30/2025

NOTES: Inlet N-Values = 0.016; Intensity = 12.4956 + -1.6712(X) + -0.3490(X)^2 + 0.0502(X)^3 -- X = Inlet time (min); Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.